

10/773,822

Amendments to the Specification:

Please amend the following paragraphs:

[0005] This method is used, for example, to make ELAT electrodes sold by E-Tek Inc. To aid in the proton conductivity of the electrodes, ~~Nafion~~⁷ NAFION is applied to the active area, and the electrodes are then sandwiched onto the membrane by hot-pressing.

[0016] Vaporized reactants and carrier gas passing through the discharges to the substrate form activated species which react on the substrate surface to deposit the desired material at low substrate temperature, allowing treatment of low melting materials such as polymer membranes. As a result, the method of the invention can use a variety of DECVD apparatus configurations, including those with parallel or coaxial electrodes, thereby providing maximum flexibility in implementation. Also, the use of low temperature DECVD to deposit catalysts on the MEA membrane enables the use of commercial polymeric membrane materials such as ~~Nafion~~⁷ and ~~Aciplex~~⁷, NAFION and ACIPLEX as well as other heat-sensitive proton conducting membrane materials such as the acrylic based electrolyte/fluoropolymer blend disclosed in International Patent Publication No. WO 0160872, and a variety of catalyst materials other than the conventional pure platinum.

[0030] As discussed above, the invention permits a wide variety of polymer membranes to be utilized, as well as membranes formed of carbon cloth or carbon particles. For example, the membrane can be formed from perfluorosulfonic acids such as ~~Nafion~~⁷ and ~~Aciplex~~⁷, NAFION and ACIPLEX polyethylene and polypropylene sulfonic acid, polystyrene sulfonic acid, and other polyhydrocarbon-based sulfonic acids, as well as polymer composites or blends. An especially preferred membrane material is an acrylic based polyelectrolyte/fluoropolymer blend described in International Patent Application No. WO 0160872.